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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,432	09/09/2005	Stephen I. Madden	003482.00020	6126

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EXAMINER	
STANDLEY, STEVEN H	

ART UNIT	PAPER NUMBER
1649	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/524,432	MADDEN ET AL.	
	Examiner	Art Unit	
	STEVEN H. STANDLEY	1649	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-67* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-67* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Election/Restrictions

1. This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group 1, claim(s) 1-13, and 36-46 drawn to a method of diagnosing glioma in a patient.

Group 2, claim(s) 14-21, drawn to a method of treating a glioma.

Group 3, claims 22-35 and 47-60 drawn to a method of identifying a test compound.

Group 4, claim(s) 61-67, drawn to a method of raising an immune response to a protein by administering.

2. This PCT rule defines special technical features as technical features that identify a contribution which each of the claimed inventions, considered as a whole, makes over prior art. The inventions listed as Groups I-4 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Tanwar et al. (2002) disclose detecting the expression of collagen IV alpha in brain tissue samples of suspected glioma patients compared to normal tissue control wherein increased expression identifies in the glioma tissue sample relative to the second tissue sample identifies it as neoplastic (see Table I, page 4367, Tanwar et al.). Therefore claims 1-

13, and 36-46 lack a special technical feature in common with claims 14-35, and 47-67 cannot share one with the other claims.

Species Election

3. Should applicant elect group I, a further species election is required. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

signal sequence receptor, delta (translocon-associated protein delta); DC2 protein; K/AA0404 protein; symplekin; Huntingtin interacting protein I; plasmalemma vesicle associated protein; KIAA0725 gene product; latexin protein; transforming growth factor, beta 1; hypothetical protein FLJ22215; Rag C protein; hypothetical protein FLJ23471; N-myristoyltransferase 1; hypothetical protein dJ 118 IN3.1; ribosomal protein L27; secreted protein, acidic, cysteine-rich (osteonectin); Hs 111988; Hs 112238; laminin, alpha 5; protective protein for beta-galactosidase (galactosialidosis); Melanoma associated gene; Melanoma associated gene; E3 ubiquitin ligase SMURF1; collagen, type IV, alpha 1; collagen, type IV, alpha 1; collagen, type IV, alpha 1; insulin-like growth factor binding protein 7; gene predicted from eDNA with a complete coding sequence; Thy-1 cell surface antigen; Hs 127824; GTP binding protein 2; Homo sapiens mRNA; eDNA DKFZp586D0918 (from clone DKFZp586D0918); cutaneous T-cell lymphoma-associated tumor antigen se20-4; differentially expressed nueleolar TGF-betal target protein (DENTT); clysfedin, limb girdle muscular dystrophy 2B (autosomal recessive); smoothelin; integrin, alpha 5 (fibronectin receptor, alpha polypeptide); putative translation initiation factor, retinoie acid induced 14; matrix metalloproteinase 9 (gelatinase B, 92kD gelatinase, 92kD type IV eollagenase); Lutheran blood group (Auberger b antigen included); stanniocalcin 2; nuclear factor (erythroid-derived 2)-like 2; protein tyrosine phosphatase, non-receptor type 1; integrin, alpha 10; collagen, type VI, alpha 2; chromosome 21 open reading frame 25; CDC37 (cell division cycle 37, S. cerevisiae, homolog); Hs 16450; Rho guanine nucleotide exchange factor (GEF) 7; creatine kinase, brain; hypothetical protein FLJ10297; hypothetical protein FLJ10350; TNF-induced protein; tumor necrosis factor receptor superfamily, member 12 (translocating chain-association membrane protein); eofilin 1 (non-muscle); splicing factor proline/glutamine rich (polypyrimidine tract-binding protein-associated); splicing factor proline/glutamine rich (polypyrimidine tract-binding protein-associated); v-ets avian erythroblastosis virus E26 oncogene homolog 1; protease, eysteine, 1 (legumain); ribosomal protein L13; chromosome 22 open reading flame 5; zinc finger protein 144 (Mel-I 8); degenerative spermatoeyte 0aomolog Drosophila; lipid desaturase); eukaryotie translation initiation factor 2C, 2; mitoehondrial ribosomal protein IA5; prostate tumor over expressed gene 1; NADH dehydrogenase (ubiquinone) 1 alpha subeomplex, 7 (14.5kD, B 14.5a); glioma endothelial marker 1 precursor;, NS 1-binding protein; ribosomal protein L38; tuftdin-interacting protein; HLA class H region expressed gene KE2; translocase of inner mitocbondrial membrane I7 homolog A (yeast); sudD

(suppressor of bimDr, Aspergillus nidulans) homolog; heparan sulfate proteogiycan 2 (perlecan); SEC24 (S. cerevisiae) related gene family, member A; NADH dehydrogenase (ubiquinone) Fe-S protein 7 (20kD) (NADH-coenzyme Q reductase); DNA segment on chromosome X and Y (unique) 155 expressed sequence; annexin A2; Homo sapiens clone 24670 mRNA sequence; hypothetical protein; matrix metalloproteinase 10 (stromelysin 2); KIAA1049 protein; G protein-coupled receptor; hypothetical protein FLJ20401; matrix metalloproteinase 14 (membrane-inserted); KIAA0470 gene product; solute carrier family 29 (nucleoside transporters), member 1; stanniocalein 1; stanniocalcin 1; stanniocalcin 1; tumor suppressor deleted in oral cancer-related 1; tumor suppressor deleted in oral cancer-related 1; apolipoprotein C-I; glutathione peroxidase 4 (phospholipid hydroperoxidase); Hs 272106; transcription factor binding to IGHM enhancer 3; hypothetical protein DKFZp762A227; hypothetical protein FLJ22362; CD59 antigen pl 8-20 (antigen identified by monoclonal antibodies 16.3A5, EJ16, EJ30, EL32 and G344); PRO0628 protein; melanoma-associated antigen recognised by cytotoxic T lymphocytes; LOC88745; Homo sapiens beta-l,3-galactosyltransferase-6 (B3GALTr) mRNA, complete cds; sprouty (Drosophila) homolog 4; sprouty (Drosophila) homolog 4; Homo sapiens mRNA; eDNA DKFZp434E 1515 (from clone DKFZp434E1515); coactosin-like protein; hypothetical protein FLJ21865; Hs296234; KIAA0685 gene product; hypothetical protein FLJ10980; ribosomal protein L10; ribosomal protein S19; Hs 299251; Huntingtin interacting protein K; Homo sapiens mP,.NA full length insert eDNA clone EUROIMAGE 50374; Hs 311780; l-Is 212191; v-akt murine thymoma viral oneogene homolog 2; Hs 328774; transducin-like enhancer of split 2, homolog of Drosophila E(spl); KIAA1870 protein; ribosomal protein L10a; peptidylprolyl isomerase A (cyclophilin A); Hs 344224; hypothetical protein FLJ23239; hypothetical protein DKFZp761H221; KIAA1887 protein; Homo sapiens mRNA full length insert eDNA clone EUROIMAGE 701679; Homo sapiens eDNA FLJ30634 fis, clone CTONG2002453; Homo sapiens eDNA FLJ32203 fis, clone PLACE6003038, weakly similar to ZINC FINGER PROTEIN 84; Homo sapiens mRNA full length insert eDNA clone EUKOIMAGE 1035904; hypothetical protein LOC57333; myosin ID; plexin B2; lectin, galaetoside-binding, soluble, 8 (galeefin 8); double ring-finger protein, Dorfin; DKFZP434B 168 protein; LIM domain binding 2; integrin beta 4 binding protein; synaptopodin; Hs 54828; insulin induced gene 1; acetyl LDL receptor, SREC; excision repair cross-complementing rodent repair deficiency, complementation group 1 (includes overlapping antisense sequence); hypothetical protein FLJ22329; schwannomin-interacting protein 1; PTEN induced putative kinase I; myosin X; Homo sapiens cDNA FL132424 fis, clone SKMUS2000954, moderately similar to Homo sapiens F-box protein Fbx25 (FBX25) 97; golgi phosphoprotein 1; splicing factor, arginine/serine-rich 6; laminin, gamma 3; cysteine-rich protein 2; U6 snRNA-associated Sm-like protein LSm7; hypothetical protein FIA10707; Homo sapiens, Similar to KIKEN cDNA 2310012N 15 gene, clone IMAGE:3342825, mRNA, partial cds; macrophage migration inhibitory factor (glycosylation-inhibiting factor); ubiquinol-cytochrome c reductase hinge protein; gap junction protein, alpha 1, 43kD (connexin 43); dihydropyfimidinase-l~e 3; aquaporin 1 (channel-forming integral protein, 28kD); protein expressed in thyroid; macrophage myristoylated alanine-rich C kinase substmte; procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine hydroxylase, Ehlers-Danlos syndrome type VI); protease, serine, 11 (IGF binding); 24-dehydrocholesterol reductase; collagen, type IV, alpha 2; profilin 1; apolipoprotein D; hyaluronoglucosaminidase 2; hypothetical protein FLJ22678; quiescin Q6; ms homolog gene family, member A; ms homolog gene family, member A; plasminogen activator, urokinase; insulin-like growth factor binding protein 3; uddine phosphorylase; KIAA0638 protein; B7 homolog 3; lamin A/C; lamin A/C; lamin A/C; regulator of G-protein signalling 12; pmteasome (prosome, macropain) 26S subunit, non-ATPase, 8; Homo sapiens, Similar to RIKEN cDNA 5730528L13 gene, clone

MGC: 17337 IMAGE:4213591, mRNA, complete cds; prosaposin (variant Gaucher disease and variant metachromatic leukodystrophy); laminin, alpha 4; transcription elongation factor A (SII), 1; lectin, galactoside-binding, soluble, 3 binding protein; ribosomal protein S 16; glycopholin C (Gerbich blood group); endothelin receptor type B; serine (or cysteine) proteinase inhibitor, clade E (nexirg plasminogen activator inhibitor type 1), member 1; biglycan; small nuclear ribonucleoprotein polypeptide B"; transmembrane 4 supeffamily member 2; TAF11 RNA polymerase If, TATA box binding protein (TBP)-associated factor, 28 kD; lysyl oxidase-like 2; SRY (sex determining region Y)-box 4; SOX4 SRY (sex determining region Y)-box 4; SRY (sex determining region "Y)-box 4; actin related protein 2/3 complex, subunit 2 (34 kD); Homo sapiens cDNA: FLJ23507 fis, clone LNG03128; hypothetical protein FLJ12442; Fas (TNFRSF6)-associated via death domain; mitogen-activated protein kinase kinase kinase 11; TEK tyrosine kinase, endothelial (venous malformations, multiple cutaneous and mucosal); insulin receptor;, cell membrane glycoprotein, 110000M(r) (surface antigen); Homo sapiens eDNA FLJ11863 fis, clone HEMBA1006926; jagged 1 (Alagille syndrome); KIAA0304 gene product; pre-B-cell leukemia transcription factor 2; Homo sapiens eDNA FLJ31238 fis, clone KIDNE2004864; p53-induced protein; complement component 1, q subcomponent, receptor 1; complement component 1, q subcomponent, receptor 1; apolipoprotein E; chemokine (C-C motif) ligand 3; coagulation factor II (thrombin) receptor-like 3; coagulation factor 1II (thromboplastin, tissue factor); collagen, type I, alpha 1; collagen, type 13I, alpha 1 (Ehlers-Danlos syndrome type IV, autosomal dominant); C-type (calcium dependent, carbohydrate-recognition domain) lectin, supeffamily member 9; cystatin C (amyloid angiopathy and cerebral hemorrhage); endoplasmic reticulum associated protein 140 kDa; ESTs; ESTs; ESTs, Highly similar to hypothetical protein FLJ10350 [Homo sapiens] [H.sapiens]; ESTs, Highly similar to

ITB 1 HUMAN Integrin beta-1 precursor (Fibronectin receptor beta subunit) (CD29) 0ntegrin VLA-4 beta subunit) [H.sapiens]; ESTs, Weakly similar to hypothetical protein FLJ20489 [Homo sapiens] [H.sapiens]; ESTs, Weakly similar to T17346 hypothetical protein DKFZp58601624.1 - human (fragment) [H.sapiens]; ESTs, Weakly similar to T21371 hypothetical protein F25H8.3 - Caenorhabditis elegans [C.elegans]; eukaryotic translation initiation factor 4A, isoform 1; heine oxygenase (decycling) 1; Hermansky-Pudlak syndrome 4; Homo sapiens eDNA FLJ34888 fis, clone NT2NE2017332; Homo sapiens eDNA FLJ39848 fis, clone SPLEN2014669; Homo sapiens mRNA full length insert eDNA clone EUROIMAGE 1977059; Homo sapiens, clone IMAGE:4845226, mRNA; hypothetical protein FL122329; hypothetical protein FLJ32205; hypothetical protein MGC4677; inhibin, beta B (activin AB beta polypeptide); insulin-like growth factor binding protein 5; junction plakoglobin; KIAA0620 protein; KIAA0943 protein; likely ortholog of rat vacuole membrane protein 1; Lysosomal-associated multispanning membrane protein-5; major histocompatibility complex, class I, B; major histocompatibility complex, class I, C; matrix Gla protein; matrix metalloproteinase 1 (interstitial collagenase); microtubule-associated protein 1 light chain 3 beta; nerve growth factor receptor (TNFR snperfamily, member 16); ribosomal protein $9; ring finger protein 40; S100 calcium binding protein, beta (neural); sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6B; SPARC-like 1 (mast9, herin); tumor necrosis factor, alpha-induced protein 3; UDP-Gal:betaGleNAc beta 1,4- galactosyltransferase, polypepfide 3; UDP-GlcNAc:betaGal beta-I,3-N-acetylglucosaminyltransferase 5; yon Willebrand factor;, v-akt murine thymoma vial oneogene homolog 2; eyelin-dependent kinase (ede2-1ike) 10; ortholog mouse myoeyfie induction/differentiation originator; brain-specific angiogenesis inhibitor 1 ; EGF-TM7 latrophilin-related protein; sema domain ; integrin, alpha 5 ; likely ortholog of mouse fibronee .fin type III; Lutheran blood group (Auberger b antigen included); SSR4, TRAPD; nerve growth factor receptor (TNFR superfamily, member 16); insulin-like growth factor

binding protein; leukemia inhibitory factor;, protein tyrosine phosphatase, nonreceptor type I; and Homo sapiens, clone IMAGE:3908182, mRNA, partial cds; and SEQ ID NO: 1-32 of claim 36.

This application contains claims directed to more than one species of the generic invention. Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

The following claim(s) are generic: claim 1 and 36.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The species have different

sequences and lack a special technical feature.

4. Should applicant elect group II, a further species election is required. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

plasmalemma vesicle associated protein; KIAA0726 gcne product; osteonectin: laminin, alpha 5; collagen, type IV, alpha 1; insulin-like growth factor binding protein 7; Thy-1 cell surface antigen; dysferlin, limb girdle muscular dystrophy 2B; integrin, alpha 5; matrix metalloproteinase 9; Lutjheran blood group, integrink, alpha 1'0, collagen, type VI, alpha 2; glioma endothelial marker I precursor; translocase of inner mitochondrial membrane 17 homolog A; heparan sulfate proteoglycan 2; annexin A2; matrix metalloproteinase 10; G protein-coupled receptor; matrix metalloproteinase 14; solute carrier family 29, member 1; CD59 antigen p18-20; KIAA 1870 protein; plexin B2; lectin, glactoside-binding, soluble, 8; integrin beta 4 binding protein; acetyl LDL receptor; laminin, gamma 3; macrophage migration inhibitory factor; gap junction p roein, alpha 1, 43 kD; aquaporin 1; protease, serine, 11; collagen, type IV, alpha 2; apolipoprotein D; plasminogen activator, urokinase; insulin-like growth factor binding protein 3; regulator of G-protein signaling I2; prosaposin; laminin, alpha 4; lectin, galactoside-binding, soluble, 3 binding protein; glycophorin C; endothelin receptor type B; biglycan; transmembmne 4 supeffamilyh member 2; lysyl osidase-like 2; TEK tyrosine kinase, endothelial; insulin receptore; cell membrane glycoprotein, 110000M(r); jagged 1; plasmalemma vesicle associated protein; TEM13, Thy-1 cell surface antigen; coagulation factor II (thrombin) receptor-like 3; dysferlin, limb girdle muscular dystrophy 2B (autosomal recessive); sema domain, transmembrane domain (TM'), and cytoplasmic domain, (semaphorin) 6B; integrin, alpha 5 (fibronectin receptor, alpha polypeptide); likely ortholog of rot vacuole membrane protein 1; nerve growth factor receptor (TNFR supeffamily, member 16); degenerative spermatocyte homolog, lipid desaturase (Drosophila); TEM1, endosialin; heine oxygenase (decycling) 1; G protein-coupled receptor;. C-type (calcium dependent, carbohydrate-recognition domain) lectin, supeffamily member 9; matrix metaUoproteinase 14 (membrane-inserted); solute carder family 29 (nucleoside transporters), member 1; likely ortholog of mouse embryonic epithelial gene 1; major histocompatibility complex, class I, C; likely ortholog of mouse fibronectin type III repeat containing protein 1; spmuty homolog 4 (Drosophila); KIAA0620 protein; coagulation factor III (thromboplastin, tissue factor); aquaporin 1 (channel-forming integral protein, 28kDa); major histocompatibility complex, class I, B; Lysosomal-associated multispanning membrane protein-5; endothelin receptor type B; insulin receptor, complement component 1, q subcomponent~ receptor I; brain-specific augiogenesis inhibitor I ; EGF-TM7 laffophilin-related protein; soma domain ; integrin, alpha 5 ; likely ortholog of mouse fibronectin type HI; Lutheran blood group (Auberger b antigen included); SSK4, TRAPD; nerve growth factor receptor (TNFR superfamily, member 16) and complement component 1, q subcomponent, receptor I

This application contains claims directed to more than one species of the generic invention. Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

The following claim(s) are generic: claim 14.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The species have different sequences and lack a special technical feature.

5. Should applicant elect group III, a further species election is required. The claims listed as species below recite monitoring 1, 2, 3 or 4 different genes in the method. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

The method of claim 28, the method of claim 29, the method of claim 30, and the method of claim 31, method of claim 53, method of claim 54, method of claim 55, method of claim 56.

This application contains claims directed to more than one species of the generic invention. Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

The following claim(s) are generic: claims 22 and 47.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The species have different sequences and lack a special technical feature.

6. Should applicant elect group III, a further species election is required that depends on the earlier election above; if applicant elects the method wherein at least one gene is monitored, then applicant should select one gene from among the species below. If applicant elects the method wherein at least two genes, then applicant should select two genes, and so on.

These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

signal sequence receptor, delta (translocon-
associated protein delta); DC2 protein; KIAA0404 protein; symplekin; Huntingtin interacting protein I; plasmalemma vesicle associated protein; KIAA0726 gene product; latexin protein; transforming growth factor, beta 1; hypothetical protein FLJ22215; Rag C protein; hypothetical protein FLJ23471; N-myristoyltransferase 1; hypothetical protein dJ1181N3.1; ribosomal protein L27; secreted protein, acidic, cysteine-rich (osteonectin); Hs 111988; I-Is 112238; laminin, alpha 5; protective protein for beta-galaetosidase (galaetosialidosis); Melanoma associated gene; Melanoma associated gene; E3 ubiquitin ligase SMURF1; collagen, type IV, alpha 1; collagen, type IV, alpha 1; collagen, type IV, alpha 1; insulin-like growth factor binding protein 7; gene predicted from eDNA with a complete coding sequence; Thy-1 cell surface antigen; Hs 127824; GTP binding protein 2; Homo sapiens mRNA; eDNA DKFZp586-D0918 (from clone DK.FZp586D0918); cutaneous T-cell lymphoma-assoeiated tumor antigen se20-4; differentially expressed nueleolar TGF-betal target protein (DENT~; dysferlin, limb girdle muscular dystrophy

2B (antosomal recessive); smoothelin; integrin, alpha 5 (fibroneetin receptor, alpha polypeptide); putative translation initiation factor; retinoie acid induced 14; matrix metalloproteinase 9 (gelatinase B, 92kD gelatinase, 92kD type IV collagenase); Lutheran blood group (Auberger b antigen included); stanniocalcin 2; nuclear factor (erythroid-derived 2)-like 2; protein tyrosine phosphatase, non-receptor type 1; integrin, alpha 10; collagen, type VI, alpha 2; chi'omosome 21 open reading frame 25; CDC37 (cell division cycle 37, S. eerevisiae, homolog); Hs 16450; Rho guanine nueleotide exchange factor (GEF) 7; creatine kinase, brain; hypothetical protein FLJ10297; hypothetical protein FI.J10350; TNF-induced protein; tumor necrosis factor receptor superfamily, member 12 (translocating chain-association membrane protein); eofilin 1 (non-muscle); splicing factor proline/glutamine rich (polypyrimidine tract-binding protein-associated); splicing factor proline/glutamine rich (polypyrimidine tract-binding protein-associated); v-ets avian erythroblastosis virus E26 oncogene homolog 1; protease, cysteine, 1 (legumain); ribosomal protein L13; chromosome 22 open reading frame 5; zinc finger protein 144 0Vlel-18); degenerative spermatocyte 0aomolog Drosophila; lipid desaturase); eukaryotie translation initiation factor 2C, 2; mitochondrial ribosomal protein L45; prostate tumor over expressed gene 1; NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 7 (14.5kD, B14.5a); glioma endothelial marker 1 precursor; NSI-binding protein; ribosomal protein L38; tuftelin-interaeting protein; HLA class II region expressed gene KE2; transloease of inner mitoehondrial membrane 17 homolog A (yeast); sudD (suppressor ofbimD6, Aspergillus nidulans) homolog; heparan sulfate proteoglyean 2 (,perlecan); SEC24 (S. cerevisiae) related gene family, member A; NADH dehydrogenase (ubiquinone) Fe-S protein 7 (20kD) (NADI-I-coenzyme Q reductase); DNA segment on chromosome X and Y (unique) 155 expressed sequence; annexin A2; Homo sapiens clone 24670 mRNA sequence; hypothetical protein; matrix metalloproteinase 10 (stromelysin 2); KIAA1049 protein; G protein-coupled receptor;, hypothetical protein FLJ2040 I; matrix metalloproteinase 14 (membrane-inserted); KIAA0470 gene product; solute carrier family 29 (nueleoside transporters), member 1; stannioealcin 1; stannioealein 1; stannioealcin 1; tumor suppressor deleted in oral cancer-related 1; tumor suppressor deleted in oral cancer-related 1; apolipoprotein C-I; glutathione peroxidase 4 (phospholipid hydroperoxidase); I-Is 272106; transcription factor binding to IGHM enhancer 3; hypothetical protein DKFZp762A227; hypothetical protein FLJ22362; CD59 antigen p 18-20 (antigen identified by monoclonal antibodies 16.3A5, EJ16, EJ30, EL32 and G344); PRO0628 protein; melanoma-associated antigen recognised by cytotoxie T lymphocytes; LOC88745; Homo sapiens beta-I,3-galactosyltransferase-6 (B3GALT6") mRNA, complete cds; sprouty (Drosophila) homolog 4; sprouty (Drosophila) homolog 4; Homo sapiens mRNA; eDNA DKFZp434E1515 (I~om clone DKFZp434E1515);

coactosin-like protein; hypothetical protein FLJ21865; Hs296234; KIAA0685 gene product; hypothetical protein FLJ 10980; ribosomal protein L10; ril~osomal protein S 19; Hs 299251; Huntingtin interacting protein K; Homo sapiens mRNA full length insert eDNA clone EUROIMAGE 50374; I-Is 311780; Hs 212191; v-akt murine thymoma viral oncogene homolog 2; Hs 328774; trausduein-like enhancer of sprit 2, homolog of Drosophila E(spl); KIAA1870 protein; ribosomal protein L10a; peptidylprolyl isomerase A (eyclophilin A); Hs 344224; hypothetical protein FLJ23239; hypothetical protein DKFZp761H221; KIAA1887 protein; Homo sapiens mRNA full length insert eDNA clone EUROIMAGE 701679; Homo sapiens eDNA FLJ30634 fis, clone CTONG2002453; Homo sapiens eDNA FLJ32203 fis, clone PLACE6003038, weakly similar to ZINC FINGER PROTEIN 84; Homo sapiens mRNA full length insert eDNA clone EUROIMAGE 1035904; hypothetical protein LOC57333; myosin ID; plexin B2; leetin, galaetoside-binding, soluble, 8 (galeetin 8); double ring-finger protein, Dorfin; DKFZP434B 168 protein; LIM domain binding 2; integrin beta 4 binding protein; synaptopodin; Hs 54828; insulin induced gene 1; acetyl LDL receptor; SREC; excision

repair eross-compiementing rodent repair deficiency, complementation group 1 (includes overlapping antisense sequence); hypothetical protein FLJ22329; sehwannomin-interacting protein 1; PTEN induced putative kinase 1; myosin X; Homo sapiens eDNA FLJ32424 fis, clone SKMUS2000954, moderately similar to Homo sapiens F-box protein Fbx25 (FBX25) 97; golgi phosphoprotein 1; splicing factor, arginine/serine-rieh 6; laminin, gamma 3; cysteine-rieh protein 2; U6 snRNA-assoeiated Sin-like protein LSm7; hypothetical protein FLJ10707; Homo sapiens, Similar to R.IKEN eDNA 2310012N15 gene, clone IMAGE:3342825, mRNA, partial eds; macrophage migration inhibitory factor (glyeosylation-inhibiting factor); ubiquinol-cytochrome c reductase hinge protein; gap junction protein, alpha 1, 43kD (connexin 43); dihydropyrimidinase-like 3; aquaporin **1** (channel-forming integral protein, 28kD); protein expressed in thyroid; maerophage myristoylated alanine-rieh C kinase substrate; proeollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine hydroxylase, Ehlers-Danlos syndrome type VI'); protease, serine, 11 (IGF binding); 24-dehydroeholesterol reductase; collagen, type IV, alpha 2; profilin 1; apolipoprotein D; hyaluronoglueosaminidase 2; hypothetical protein FLJ22678; quiesein Q6; ras homolog gene family, member A; ras homolog gene family, member A; plasminogen activator, urokinase; insulin-like growth factor binding protein 3; uridine phosphorylase; KIA.A0638 protein; B7 homolog 3; lamin A/C; lamin A/C; lamin A/C; regulator of G-protein signalling 12; proteasome (prosome, maeropain) 26S subunit, non-

ATPase, 8; Homo sapiens, Similar to R.IKEN eDNA 5730528L13 gene, clone

MGC: 17337 IMAGE:4213591, mRNA, complete cds; prosaposin (variant Ganeher disease and variant metachromatie leukodystrophy); laminin, alpha 4; transcription elongation factor A (SI/), 1; lectin, galaetoside-binding, soluble, 3 binding protein; ribosomal protein S 16; glyeopborin C (Gerbich blood group); endothelin receptor type B; serine (or cysteine) proteinase inhibitor, clade £ (nexin, plasminogen activator inhibitor type 1), member 1; biglycan; small nuelear.ribonucleoprotein polypeptide B"; transmembrane 4 superfamily member 2; TAF11 KNA polymerase II, TATA box binding protein (TBP)-associated factor, 28 k.D; lysyl oxidase-like 2; SRY (sex determining region Y)-box 4; SOX4 SRY (sex determining region Y)-box 4; SP-,Y (sex determining region Y)-box 4; actin related protein 2/3 complex, subunit 2 (34 kD); Homo sapiens eDNA: FLJ23507 fis, clone LNG03128; hypothetical protein FLJ12442; Fas (TN-FRSF6")-associated via death domain; mitogen-activated protein kinase kinase kinase 11; TEK tyrosine kinase, endothelial (venous malformations, multiple cutaneous and mucosal); insulin receptor;, cell membrane glycoprotein, 110000M(r) (surface antigen); Homo sapiens eDNA FLJ11863 fis, clone I-IEMBA1006926; jagged 1 (Alagille syndrome); KIAA0304 gene product; pre-B-cell leukemia transcription factor 2; Homo sapiens eDNA FLJ31238 fis, clone KIDNE2004864; p53-induced protein; complement component 1, q subcomponent, receptor 1; complement component 1, q subcomponent, receptor 1; apolipoprotein E; chemokine (C-C motif) ligand 3; coagulation factor 1I (thrombin) receptor-like 3; coagulation factor HI (thromboplastin, tissue factor); collagen, type I, alpha 1; collagen, type In, alpha 1 (Ehlers-Danlos syndrome type IV, autosomal dominant); C-type (calcium dependent, carbohydrate-recognition domain) leetin, superfamily member 9; cystatin C (amyloid angiopathy and cerebral hemorrhage); endoplasmie reticulum associated protein 140 kDa; ESTs; ESTs; ESTs, Highly similar to hypothetical protein FLJ10350 [Homo sapiens] [H.sapiens]; ESTs, Highly similar to ITBI_I-IUMAN Integrin beta-1 precursor (Fibronectin receptor beta subunit) (CD29) (Integrin VLA-4 beta subunit) [H.sapiens]; ESTs, Weakly similar to hypothetical protein FLJ20489 [Homo sapiens] [H.sapiens]; ESTs, Weakly similar to T17346 hypothetical protein DKFZp58601624.1 - human (fragment) [H.sapiens]; ESTs, Weakly similar to T21371 hypothetical protein F25H8.3 -'Caenorhabditis elegans [C.elegans]; eukaryoti~ translation initiation factor 4A, isoform 1; heme oxygenase (deeycling) 1; Hermansky-

Pudlak syndrome 4; Homo sapiens eDNA FLJ34888 fis, clone NT2N£2017332; Homo sapiens eDNA FLJ39848 fis, clone SPLEN2014669; Homo sapiens mRNA full length insert eDNA clone EUROIMAGE 1977059; Homo sapiens, clone IMAGE:4845226, mRNA; hypothetical protein FIA22329; hypothetical protein FLJ32205; hypothetical protein MGCA677; inkibin, beta B (aetivin AB beta polypeptide); insulin-like growth factor binding protein 5; junction plakoglobin; IAA0620 protein; KIAA0943 protein; likely ortholog of rat vacuole membrane protein 1; Lysosomal-assoeiated multispanning membrane protein-5; major histoeompatibility complex, class I, B; major histocompatibility complex, class I, C; matrix Gla protein; matrix metalloproteinase 1 (interstitial collagenase); mierotubule-assoeiated protein 1 light chain 3 beta; nerve growth factor receptor (TNFR superfamily, member 16); ribosomal protein $9; ring finger protein 40; S 100 calcium binding protein, beta (neural); sema domain, transmembrane domain (TIVI), and cytoplasmic domain, (semaphorin) 6B; SPARC-like 1 (mast9, hevin); tumor necrosis factor, alpha-induced protein 3; UDP-Gal:betaGleNAe beta 1,4- galaetosyltmnsferase, polypeptide 3; UDP-GlcNAe:betaGal beta-I,3-N-aeetylglueosaminyltransferase 5; yon Willebrand factor; v-akt murine thymoma vial oneogene homolog 2; cyelin-dependent kinase (cde2-1ike) 10; ortholog mouse myoeytie induction/differentiation originator; brain-specific angiogenesis inhibitor 1 ; EGF-TM7 latrophilin-related protein; sema domain ; integrin, alpha 5 ; likely ortholog ofmonse fibroneetin type I~; Lutheran blood group (Auberger b antigen included); SSR4, TRAPD; nerve growth factor receptor (TNFR superfamily, member 16); insulin-like growth factor binding protein; leukemia inhibitory factor; protein tyrosine phosphatase, nonreceptor type I; and Homo sapiens, clone IMAGE:3908182, mRNA, partial cds; and SEQ ID NO: 1-32 of claim 47.

This application contains claims directed to more than one species of the generic invention. Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

The following claim(s) are generic: claims 22 and 47.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The species have different sequences and lack a special technical feature.

7. Should applicant elect group IV a further species election is required. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

signal sequence receptor, delta (translocon-associated protein delta); DC2 protein; K.IAA0404 protein; symplekin; Huntingtin interacting protein I; plasmalemma vesicle associated protein; KIAA0726 gene product; latexin protein; transforming growth factor, beta 1; hypothetical protein FLJ22215; Rag C protein; hypothetical protein FLJ23471; N-myristoyltransferase 1; hypothetical protein d J1181N3.1; ribosomal protein L27; secreted protein, acidic, cysteine-rich (osteoneetin); Hs 111988; H~ 112238; laminin, alpha 5; protective protein for beta-galaetosidase (galactosialidosis); Melanoma associated gene; Melanoma associated gene; E3 ubiquitin ligase SMURF1; collagen, type IV, alpha 1; collagen, type IV, alpha 1; collagen, type IV, alpha 1; insulin-like growth factor binding protein 7; gene predicted from eDNA with a complete coding sequence; Thy-1 cell surface antigen; Hs 127824; GTP binding protein 2; Homo sapiens rnRNA; eDNA DKFZp586D0918 (from clone DKFZp586D0918); cutaneous T-cell lymphoma-assoeiated tumor antigen se20-4; differentially expressed nueleolar TGF-betal target protein (DENTI~; dysferlin, limb girdle muscular dystrophy 2B (autosomal recessive); smoothelin; integrin, alpha 5 (fibronectin receptor, alpha polypeptide); putative translation initiation factor;, retinoic acid induced 14; matrix metalloproteinase 9 (gelatinase B,

92kD gelatinase, 92kD type IV collagenase); Lutheran blood group (Auberger b antigen included); stanniocalein 2; nuclear factor (erythroid-derived 2)-like 2; protein tyrosine phosphatase, non-receptor type 1; integrin, alpha 10; collagen, type VI, alpha 2; chromosome 21 open reading frame 25; CDC37 (cell division cycle 37, S. cerevisiae, homolog); Hs 16450; Rho guanine nueleotide exchange factor (GEF) 7; ereatine kinase, brain; hypothetical protein FLJ10297; hypothetical protein FI_J10350; TNF-indueed protein; tumor necrosis factor receptor superfamily, member 12 (transloeating chain-association membrane protein); cofilin 1 (non-muscle); splicing factor proline/glutamine rich (polypyrimidine tract-binding protein-associated); splicing factor proline/glutamine rich (polypyrimidine tract-binding protein-associated); v-eta avian erythroblastosis virus 1/26 oncogene homolog 1; protease, eysteine, 1 (legumain); ribosomal protein L13; chromosome 22 open reading flame 5; zinc finger protein 144 (Mel-18); degenerative spermatoeyte 0aomolog Drosophila;

lipid desaturase); eukaryotie translation initiation factor 2C, 2; mitoehondrial ribosomal protein L45; prostate tumor over expressed gene 1; NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 7 (14.5kD, B14.5a); glioma endothelial marker 1 precursor, NS 1-binding protein; ribosomal protein L38; tuftelin-interacting protein; HLA class II region expressed gene KE2; transloease of inner mitochondrial membrane 17 homolog A (yeast); sudD (suppressor ofbimD6, Aspergillns nidulans) homolog; heparan sulfate proteoglyean 2 (perleean); SEC24 (S. cerevisiae) related gene family, member A; NADH dehydrogenase (ubiquinone) Fe-S protein 7 (20kD) (NADH-coenzyme Q reductase); DNA segment on chromosome X and Y (unique) 155 expressed sequence; annexin A2; Homo sapiens clone 24670 mR.NA sequence; hypothetical protein; matrix metalloproteinase 10 (stromelysin 2); KIAA1049 protein; G protein-coupled receptor; hypothetical protein FLJ20401; matrix metalloproteinase 14 (membrane-inserted); KIAA0470 gene product; solute carrier family 29 (nucleoside transporters), member 1; stanniocalcin 1; stannioealcin 1; stannioealcin 1; tumor suppressor deleted in oral cancer-related 1; tumor suppressor deleted in oral cancer-related 1; apolipoprotein C-I; glutathione peroxidase 4 (.phospholipid hydroperoxidase); Hs 272106; transcription factor binding to IGHM enhancer 3; hypothetical pjfgtei~DKFZp762A227; hypothetical protein FLJ22362; CD59 antigen

p18-20 (antigen identified by monoelonal antibodies 16.3A5, E J16, EJ30, EL32 and G344); PRO0628 protein; melanoma-ass0ciated antigen recognised by cytotoxic T lymphocytes; LOC88745; Homo sapiens beta-l,3-galactosyltransferase-6 (B3GALT6) mRNA, complete cds; sprouty (Drosophila) homolog 4; sprouty (Drosophila) homolog 4; Homo sapiens mRNA; eDNA DK.FZp434E1515 (from clone DKFZp434E 1515); eoaetosin-like protein; hypothetical protein FLJ21865; Hs296234; KIAA0685 gene product; hypothetical protein FLJ10980; ribosomal protein L10; ribosomal protein S19; Hs 299251; Huntingtin interacting protein K; Homo sapiens mRNA full length insert eDNA clone EUROIMAGE 50374; Hs 311780; Hs 212191; v-akt murine thymoma viral oneogene homolog 2; l-ls 328774; transduein-like enhancer of sprit 2, homolog of Drosophila E(spl); KIAA1870 protein; ribosomal sapiens mRNA full length insert cDNA clone EUROIMAGE 1035904; hypothetical protein LOC57333; myosin ID; plexin B2; leetin, galactoside-binding, soluble, 8 (galoctin 8); double ring-finger protein, Dorfin; DKFZP434B 168 protein; LIM domain binding 2; integrin beta 4 binding protein; synaptopodin; Hs 54828; insulin induced gone 1; acetyl LDL receptor;, StLEC; excision repair cross-complementing rodent repair deficiency, complementation group 1 (includes overlapping antisonso sequence); hypothetical protein FI.J22329; schwannomin-interacting protein 1; PTEN induced putative kinase 1; myosin X; Homo sapiens eDNA FLJ32424 fis, clone SKMUS2000954, moderately similar to Homo sapiens F-box protein Fbx25 Qr"BX25)

97; golgi phosphoprotein 1; splicing factor, arginine/sorino-rich 6; laminin, gamma 3; cystoine-rich protein 2; U6 smRNA-assoeiated Sin-like protein LSm7; hypothetical protein FLJ10707; Homo sapiens, Similar to RIKEN eDNA 2310012N15 gone, clone IMAGE:3342825,. mRNA, partial cds; macrophage migration inhibitory factor (glycosylation-inhibiting factor); ubiquinol-eytoehrome c reductase hinge protein; gap junction protein, alpha 1, 43kD (connexin 43); dihydropyrimidinaso-like 3; aquaporin 1 (channel-forming integral protein, 28kD); protein expressed in thyroid; maerophage myristoylatod alanine-fich C lduase substrate; proeollagen-lysine, 2-oxoglutarate 5-dioxyg~nas~ (lysine hydroxylase, Ehlers-Danlos syndrome type VI); protease, serino, 11 (IGF binding); 24-dehydroeholesterol reductase; collagen, type IV, alpha 2; profilin 1; apolipoprotein D; hyaluronoglueosaminidase 2; hypothetical protein FLJ22678; quiesein Q6; ras homolog gene family, member A; ras homolog gene family, member A; plasminogen activator, urokinase; insulin-like growth factor binding protein 3; uridine phosphorylaso; KIAA0638 protein; B7 homolog 3; lamin A/C; lamin A/C; lamin A/C; regulator of G-protein signalling 12; proteasome

(prosomo, maeropain) 26S subunit, non-ATPase, 8; Homo sapiens, Similar to RIKEN eDNA 5730528L 13 gone, clone MGC: 17337 IMAGE:4213591, mRNA, complete cds; prosaposin (variant Gaueher disease and variant metaehromatie leukodystrophy);
laminin, alpha 4; transcription elongation factor A (SID, 1; leetin, galactoside-binding, soluble, 3 binding protein; ribosomal protein S16; glyeophorin C (Gorbich blood group); endothelin receptor type B; serino (or cysteine) proteinaso inhibitor, elade E (noxin, plasminogen activator inhibitor type 1), member 1; biglyean; small nuclear ribonucleoprotein polypeptide B"; transmombrane 4 superfamily member 2; TAF11 RNA polymeraso II, TATA box binding protein (TBP)-assoeiated factor, 28 kD; lysyl oxidaso-like 2; SRY (sex determining region Y)-box 4; sex4 SRY (sex determining region Y)-box 4; SRY (sex determining region Y)-box 4; actin related protein 2/3
complex, subunit 2 (34 kD)i Homo sapiens cDNA: FIA23507 fis, clone LNG03128; hypothetical protein FIA12442; Fas (TNFRSF6)-associated via death domain; mitogeri-activated protein kinase kinase kinase 11; TEK tyrosine kinase, endothelial (venous malformations, multiple cutaneous and mueosal); insulin receptor; cell membrane glyeoprotein, 110000M(r) (surface antigen); Homo sapiens eDNA FLJ11863 fis, clone HEMBA1006926; jagged 1 (Alagille syndrome); KIAA0304 gene product; pre-B-eell leukemia transcription factor 2; Homo sapiens eDNA FLJ31238 fis, clone KIDNE2004864; p53-induced protein; complement component 1, q subeomponent, receptor 1; complement component 1, q subeomponent, receptor 1; apolipoprotein E; chemokine (C-C motif) ligand 3; coagulation factor II (thrombin) receptor-like 3; coagulation factor IH (thromboplastin, tissue factor); collagen, type I, alpha 1; collagen, type rn, alpha 1 ('Ehlers-Danlos syndrome type IV, autosomal dominant); C-type (calcium dependent, carbohydrate-recognition domain) leetin, superfamily member 9; eystatin C (amyloid angiopathy and cerebral hemorriaage); endoplasmie reticulum associated protein 140 kDa; ESTs; ESTs; ESTs, Highly similar to hypothetical protein FLJ10350 [Homo sapiens] [H.sapiens]; ESTs, Highly similar to I _TI~-IUMAlq Integrin beta-1 precursor ('Fibronectin receptor beta subunit) (CD29) 0ntegrin VLA-4 beta subuni0 [H.sapiens]; ESTs, Weakly similar to hypothetical protein FLJ20489 [Homo sapiens] [H.sapiens]; ESTs, Weakly similar to T17346 hypothetical protein DK.FZp58601624.1 - human (fragment) [H.sapiens]; ESTs, Weakly similar to T21371 hypothetical protein F25H8.3 - Caenorhabditis elegans [C.elegans]; eukaryotie translation initiation factor 4A, isoform 1; heine oxygenase (deeycling) 1; Hermansky-Pudlak syndrome 4; Homo sapiens eDNA FLJ34888 fis, clone NT2NE2017332; Homo sapiens eDNA FLJ39848 fis, clone SPLEN2014669; Homo sapiens rnRNA full length insert eDNA clone EUROIMAGE 1977059; Homo sapiens, clone IMAGE:4845226, mRNA; hypothetical protein

FLJ22329; hypothetical protein FL132205; hypothetical protein MGCA677; inhibin, beta B (activin AB beta polypeptide); insulin-like growth factor binding protein 5; junction plakoglobin; KIAA0620 protein; K/AA0943 protein; likely ortholog of rat vacuole membrane protein 1; Lysosomal-associated multisparming membrane protein-5; major histoeompatibility complex, class I, B; major histoeompatibility complex, class I, C; matrix Gla protein; matrix metalloproteinase 1 (interstitial eollagenase); mierotubule-assoeiated protein 1 light chain 3 beta; nerve growth factor

receptor ('I'NFR superfamily, member 16); ribosomal protein $9; ring finger protein 40; S100 calcium binding protein, beta (neural); sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6B; SPARC-like 1 (mastg, hevin); tumor necrosis factor, alpha-induced protein 3; UDP-Gal:betaGlcNAc beta 1,4- galactosyltransfemse, polypeptide 3; UDP-GlcNAc:betaGal beta-I,3-N-acetylglucosaminyltransferase 5; yon Willebrand factor; v-akt routine thymoma vial oncogene homolog 2; cyclin-dependent kinase (cdc2-1ike) 10; ortholog mouse myocytic induction/differentiation originator, brain-specific angiogenesis inhibitor 1 ; EGF-TM7 latrophilin-related protein; sema domain ; integrin, alpha 5 ; likely ortholog of mouse fibronectin type III; Lutheran blood group (Auberger b antigen included); SSR4, TRAPD; nerve growth factor receptor (TNFR supeffamily, member 16); insulin-like growth factor binding protein; leukemia inhibitory factor; protein tyrosine phosphatase, nonreceptor type I; and Homo sapiens, clone IMAGE:3908182

This application contains claims directed to more than one species of the generic invention. Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

The following claim(s) are generic: claim 61.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The species have different sequences and lack a special technical feature.

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Standley whose telephone number is **(571) 272-3432**. The examiner can normally be reached on Monday through Friday, 8:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Stucker can be reached on **(571) 272-0911**.

The fax number for the organization where this application or proceeding is assigned is **(571) 273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see **http://pair-direct.uspto.gov**. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Steve Standley, Ph.D.
3/21/08

/David S Romeo/
Primary Examiner, Art Unit 1647